#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025827 Address: 333 Burma Road **Date Inspected:** 06-Mar-2011

City: Oakland, CA 94607

**Project Name:** SAS Superstructure OSM Arrival Time: 1500 **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

**NDT** 

OBG Bay 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 08473.

Ultrasonic Testing (UT)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG. The weld designations reviewed is as follows:

SA7512C-251, 243, 244, 245, 246, 247, 248, 264, 255, 256, 257, 258, 259, 260 SA7512C-253, 265

WELDING

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

OBG Bay 14

This QA Inspector randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3019B-002 located on Side Plate Floor Beam of the OBG Segment 14E. The welder is identified as 051356. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3019T-140 located at Floor Beam of the OBG Segment 14E. The welder is identified as 044790. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3007Q-302 located Floor Beam to Deck Panel Diaphragm of the OBG Segment 13AE. The welder is identified as 050242. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3007C-326 located on Floor Beam to Deck Panel Diaphragm of the OBG Segment 13AE. The welder is identified as 055491. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SA3005-001-002 located on OBE13. The welder is identified as 044824. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SA3066-001-018 located on FL4 Plate to Longitudinal Diaphragm of the OBG Segment 14E. The welder is identified as 216086. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair & B-WR20346.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as Seg3019N-098 located on Floor Beam of the OBG Segment 14E. The welder is identified as 050969. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as

## WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Seg3019Q-1-116 located on FL4 Plate of the OBG Segment 14E. The welder is identified as 044779. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as Seg3019Q-1-124 located on FL4 Plate of the OBG Segment 14E. The welder is identified as 215553. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

# **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Singh, Vikram	Quality Assurance Inspector
Reviewed By:	Patterson, Rodney	QA Reviewer